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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,783	03/26/2004	John P. O'Brien	6938-0001-1	9654

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MCCORMICK, PAULDING & HUBER LLP
 CITY PLACE II
 185 ASYLUM STREET
 HARTFORD, CT 06103

EXAMINER

BERGIN, JAMES S

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/810,783	Applicant(s) O'BRIEN ET AL.	
	Examiner James S. Bergin	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Drawings

1. The objection to the drawings under See 37 CFR 1.84(b)(2) in the previous office action mailed 3/29/2005 is incorporated herein by reference.

Claim Objections

2. Claim 2 is objected to because of the following informalities: In claim 2, line 7, the typographical error, [at ascertain] should likely be replaced with to ascertain.
Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kowalski (US 4,010,914) in view of Cawte (US 5,020,435).

Kowalski teaches a detonating cord reel (22) having a drum mounted detonating cord, and end flanges (fig. 1). Kowalski does not teach the cord having numerical markings.

Cawte teaches a detonating cord (fig. 2; col. 1, lines 1-13; col. 2, lines 5-15; col. 3, lines 20-34) having incremental numerical markings on the cord at predetermined locations along the cord, said numerical markings providing an accurate visual

indication of the length of the cord and thus the depth of the borehole into which the cord is lowered. Cawte discloses that the numerals may suitably be arranged in increasing order from one end of the fuze to the other (col. 2, lines 13-14; see also col. 3, lines 27-34). Cawte discloses in col. 3, lines 50-55, that the provision of length indicating indicia on the fuze of this invention serves an important function. Namely, it enables the fuze itself to be used as a tape measure to measure the depth of the blasthole in which the fuze is being used. Cawte discloses in col. 4, lines 3-5, in use, the fuze is introduced vertically into the blasthole until the distal end of the fuze is adjacent the bottom of the blasthole. Cawte discloses in col. 4, lines 9-15, that if the tubing also contains length-indicating numerals, the depth of the hole can be simply read from the tube at the top of the hole or by subtraction from the readings at the top and bottom of the hole.

In view of the teachings of Cawte, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to include length indicating indicia, such as numerals arranged in increasing order from one end of Kowalski's detonating cord to the other, thereby enabling a user to use Kowalski's detonating cord as a tape measure to measure the length of a deployed distance of the detonating cord in any field application thereof. Kowalski's drum mounted detonating cord inherently has a known pre-usage length, and as modified by Cawte, would inherently display the length of detonating cord remaining on the drum to a sighted user thereof. If Kowalski's detonating cord was 100 meters long before usage, and had numerical markings thereon, it is inherent that a user could readily observe, using the numerical markings

on the detonating cord, that 40 meters had been used, and that consequently 60 meters remained on the drum.

Response to Arguments

5. Applicant's arguments filed 6/29/2005 have been fully considered but they are not persuasive. Kowalski's drum mounted detonating cord inherently having a known pre-usage length, and as modified by Cawte, would inherently display the length of detonating cord remaining on the drum to any sighted user thereof.
6. The examiner disagrees with the applicant and takes the position that Cawte does not teach away from the invention. Cawte has merely been used to show a teaching of including length indicating numerical indicia deployed along the length of a detonating cord thereby enabling a user to use Kowalski's detonating cord as a tape measure to measure the length of a deployed distance of the detonating cord in any field application thereof. The additional benefit of being able to accurately estimate the amount of cord remaining on the drum after usage of an amount of the cord in a field application, is an inherent benefit that would be readily observable by any sighted user of the Kowalski's detonating cord dispensing drum as modified by the teaching of Cawte.
7. The examiner is not suggesting that Cawte teaches a drum.
8. Regarding the applicants arguments on page 4 of the arguments filed 6/29/2005, it is noted that the applicant's claims do not claim a drum mounted detonating cord of

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unknown or unknowable pre-usage length and/or that has had an unknown amount of cord removed therefrom during a previous usage.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James S. Bergin



MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER